

(FILE 'HOME' ENTERED AT 17:09:31 ON 08 DEC 2003)

FILE 'MEDLINE, BIOSIS, SCISEARCH, LIFESCI, CANCERLIT, BIOTECHDS, CAPLUS'  
ENTERED AT 17:09:56 ON 08 DEC 2003

L1 1096 S HELODERMIN# OR HELOSPECTIN OR TGLP1 OR (TGLP(W)1)  
L2 26236 S (GASTR? OR BOWEL OR INTESTIN?) (W)EMPTY?  
L3 26389 S (GASTR? OR BOWEL OR INTESTIN?) (A)EMPTY?  
L4 34620 S (GASTR? OR BOWEL OR INTESTIN?) (A)MOTILITY  
L5 0 S L1(S)L3  
L6 2 S L1(S)L4

FILE 'PCTFULL, USPATFULL, EUROPATFULL' ENTERED AT 17:14:18 ON 08 DEC 2003

L7 100 S HELODERMIN# OR HELOSPECTIN OR TGLP1 OR (TGLP(W)1)  
L8 4903 S (GASTR? OR BOWEL OR INTESTIN?) (A) (EMPTY? OR MOTILITY)  
L9 15 S L7 AND L8  
L10 23 S EXENDIN1 OR EXENDIN2 OR (EXENDIN(W) (1 OR 2))  
L11 23 DUP REM L10 (0 DUPLICATES REMOVED)  
L12 0 S (1994 AND 7 AND 153)/SO

FILE 'MEDLINE, BIOSIS' ENTERED AT 18:13:52 ON 08 DEC 2003

L13 444 S (1994 AND 7 AND 153)/SO  
L14 2 S L13 AND KUBIAK?/AU

FILE 'MEDLINE' ENTERED AT 18:15:24 ON 08 DEC 2003

L15 1 S (1984 AND 166 AND 273)/SO  
L16 2 S (1984 AND 166 AND 277)/SO  
L17 1 S (1984 AND 166 AND 283)/SO

FILE 'MEDLINE, BIOSIS, SCISEARCH, CANCERLIT, LIFESCI, BIOTECHDS, CAPLUS'  
ENTERED AT 18:24:36 ON 08 DEC 2003

L18 260671 S SECRETIN# OR VIP OR PHI  
L19 3385 S (PANCREATIC(W) SECRETORY(W) FACTOR) OR PSF  
L20 264030 S L18 OR L19  
L21 180 S L20(S)L2  
L22 180 S L20(S)L3  
L23 252 S L20(S)L4  
L24 415 S L22 OR L23  
L25 279 S L24 AND PY<1997  
L26 171 DUP REM L25 (108 DUPLICATES REMOVED)

=> s l24(s) (reduc? or slow? or delay? or abrogat? or eliminat? or decreas? or  
antagoni? or inhibit?)

3 FILES SEARCHED...

L27 189 L24(S) (REDUC? OR SLOW? OR DELAY? OR ABROGAT? OR ELIMINAT? OR  
DECREAS? OR ANTAGONI? OR INHIBIT?)

=> s l27 and py<1997

2 FILES SEARCHED...

L28 116 L27 AND PY<1997

=> dup rem l28

PROCESSING COMPLETED FOR L28

L29 79 DUP REM L28 (37 DUPLICATES REMOVED)

L3 ANSWER 1 OF 1 MEDLINE on STN  
 ACCESSION NUMBER: 93332151 MEDLINE  
 DOCUMENT NUMBER: 93332151 PubMed ID: 8393295  
 TITLE: Actions of Helodermatidae venom peptides and mammalian glucagon-like peptides on gastric chief cells.  
 AUTHOR: Rai A; Singh G; Raffaniello R; Eng J; Raufman J P  
 CORPORATE SOURCE: Department of Medicine, State University of New York-Health Science Center, Brooklyn 11203-2098.  
 CONTRACT NUMBER: DK-34189 (NIDDK)  
 SOURCE: AMERICAN JOURNAL OF PHYSIOLOGY, (1993 Jul) 265 (1 Pt 1) G118-25.  
 Journal code: 0370511. ISSN: 0002-9513.  
 PUB. COUNTRY: United States  
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)  
 LANGUAGE: English  
 FILE SEGMENT: Priority Journals  
 ENTRY MONTH: 199308  
 ENTRY DATE: Entered STN: 19930903  
 Last Updated on STN: 19990129  
 Entered Medline: 19930826

AB The actions of peptides (helospectin I, helodermin, exendin-3, exendin-4) that have been isolated from the venoms of Helodermatidae lizards were examined using dispersed chief cells from guinea pig stomach. These actions were compared with those of mammalian glucagon-like peptides, particularly truncated glucagon-like peptide 1 (TGLP-1), a peptide that shares 53% homology with exendin-4. The Helodermatidae venom peptides and TGLP-1 caused a two- to threefold increase in chief cell adenosine 3',5'-cyclic monophosphate and pepsinogen secretion. Exendin-3 and exendin-4 were 100 times more potent than helospectin I and helodermin and 10 times more potent than TGLP-1. Helospectin I and helodermin, but not exendin-4 or TGLP-1, inhibited the binding of 125I-labeled vasoactive intestinal peptide (VIP) and 125I-secretin to dispersed chief cells. The actions of exendin-3, exendin-4, and TGLP-1, but not those of helospectin I, helodermin, VIP, or secretin, were progressively inhibited by increasing concentrations of an exendin-receptor antagonist, exendin-(9-39)-NH<sub>2</sub>. These data indicate that in gastric chief cells, whereas the actions of helospectin I and helodermin are mediated by interaction with high-affinity secretin (low-affinity VIP) receptors, the actions of exendin-3, exendin-4, and TGLP-1 are mediated by interaction with exendin receptors.

L11 ANSWER 2 OF 2 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: AAR80545 peptide DGENE

TITLE: Stimulating/inhibiting insulin release with exendin polypeptide(s) - for treating diabetes mellitus and preventing hyperglycaemia.

INVENTOR: Eng J

PATENT ASSIGNEE: (ENGJ-I)ENG J.

PATENT INFO: US 5424286 A 19950613 17p

APPLICATION INFO: US 1993-66480 19930524

PRIORITY INFO: US 1993-66480 19930524

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1995-262627 [34]

DESCRIPTION: Heloderma horridum exendin-3.

AN AAR80545 peptide DGENE

AA 2 A; 1 R; 1 N; 2 D; 0 B; 0 C; 1 Q; 4 E; 0 Z; 4 G; 1 H; 1 I; 3 L; 2 K; 1 M; 2 F; 4 P; 6 S; 2 T; 1 W; 0 Y; 1 V; 0 Others

SQL 39

SEQ

1 hsdgtftsdl skqmeeeeavr lfiewlknngg pssgappps

=====

HITS AT: 1-39

L11 ANSWER 1 OF 2 DGENE COPYRIGHT 2003 THOMSON DERWENT on STN

ACCESSION NUMBER: AAR80546 peptide DGENE

TITLE: Stimulating/inhibiting insulin release with exendin polypeptide(s) - for treating diabetes mellitus and preventing hyperglycaemia.

INVENTOR: Eng J

PATENT ASSIGNEE: (ENGJ-I)ENG J.

PATENT INFO: US 5424286 A 19950613 17p

APPLICATION INFO: US 1993-66480 19930524

PRIORITY INFO: US 1993-66480 19930524

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 1995-262627 [34]

DESCRIPTION: Heloderma suspectum exendin-4.

AN AAR80546 peptide DGENE

AA 2 A; 1 R; 1 N; 1 D; 0 B; 0 C; 1 Q; 5 E; 0 Z; 5 G; 1 H; 1 I; 3 L; 2 K; 1 M; 2 F; 4 P; 5 S; 2 T; 1 W; 0 Y; 1 V; 0 Others

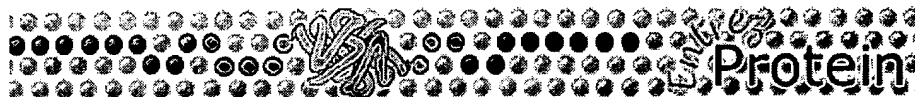
SQL 39

SEQ

1 hgegtftsdl skqmeeeavr lfiewlkngg pssgappps

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HITS AT: 1-39



Entrez	PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	Books
Search Protein		<input checked="" type="checkbox"/> for		Limits		Preview/Index		History
Clipboard		Details		Send to		File		Get Subsequence

☐ 1: HWGHS. exendin-1 - Mexic...[gi:69269]

[BLink](#), [Links](#)

LOCUS HWGHS 38 aa linear VRT 07-MAY-1999  
 DEFINITION exendin-1 - Mexican beaded lizard.  
 ACCESSION HWGHS  
 VERSION HWGHS GI:69269  
 DBSOURCE pir: locus HWGHS;

summary: #length 38 #molecular-weight 4096 #checksum 8167  
 ;  
 includes: helospectin II  
 ;  
 superfamily: glucagon  
 ;  
 PIR dates: 04-Dec-1986 #sequence\_revision 04-Dec-1986 #text\_change  
 07-May-1999

KEYWORDS duplication; secretagogue; venom.  
 SOURCE Heloderma horridum (Mexican beaded lizard)  
 ORGANISM Heloderma horridum  
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
 Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae;  
 Heloderma.

REFERENCE 1 (residues 1 to 38)  
 AUTHORS Parker,D.S., Raufman,J.P., O'Donohue,T.L., Bledsoe,M., Yoshida,H.  
 and Pisano,J.J.

TITLE Amino acid sequences of helospectins, new members of the glucagon  
 superfamily, found in Gila monster venom

JOURNAL J. Biol. Chem. 259 (19), 11751-11755 (1984)

MEDLINE 85006896

PUBMED 6207171

REMARK Heloderma suspectum (Gila monster)

REFERENCE 2 (residues 1 to 38)  
 AUTHORS Vandermeers,A., Gourlet,P., Vandermeers-Piret,M.C., Cauvin,A., De  
 Neef,P., Rathe,J., Svoboda,M., Robberecht,P. and Christophe,J.

TITLE Chemical, immunological and biological properties of peptides like  
 vasoactive-intestinal-peptide and peptide-histidine-isoleucinamide  
 extracted from the venom of two lizards (Heloderma horridum and  
 Heloderma suspectum)

JOURNAL Eur. J. Biochem. 164 (2), 321-327 (1987)

MEDLINE 87190398

PUBMED 3569266

REMARK annotation

reanalysis of peptide components in the venoms of Heloderma  
 horridum and H. suspectum indicated that exendin-1 and its  
 37-residue variant are the major components of H. horridum venom,  
 whereas exendin-2 is the major peptide from H. suspectum venom  
 (very small amounts of exendin-1 may be present); it is suggested  
 that the source of the venom used by Parker et al. (reference  
 number A01555) may have been misidentified

COMMENT Exendins are venom components that are thought to bind to receptors  
 for vasoactive intestinal peptide and/or secretin on pancreatic  
 acinar cells and to activate adenylate cyclase, resulting in

secretion of amylase.

FEATURES	Location/Qualifiers
source	1..38 /organism="Heloderma horridum" /db_xref="taxon:8551"
<u>Protein</u>	1..38 /product="exendin-1" /note="helodermin H38; helospectin I"
<u>Region</u>	1..38 /region_name="product" /note="exendin-1 (helospectin I)"
<u>Region</u>	1..37 /region_name="product" /note="helospectin II"

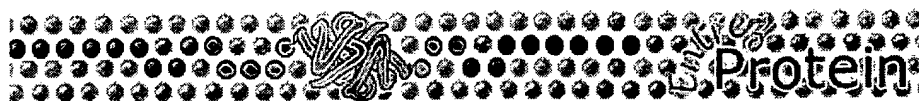
ORIGIN

1 hsdatftaey skllaklalq kylesilgss tsprppss

//

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[NCBI](#) | [NLM](#) | [NIH](#)

Dec 12 2005 12:54:38



Entrez	PubMed	Nucleotide	Protein	Genome	Structure	PMC	Taxonomy	Books
Search <input type="text" value="Protein"/>		<input checked="" type="checkbox"/> for		<input type="text" value=""/>		<input type="button" value="Go"/>		<input type="button" value="Clear"/>
Limits		Preview/Index		History		Clipboard		Details
Display <input type="text" value="default"/>		<input checked="" type="checkbox"/> Show		<input type="text" value="20"/>		<input type="button" value="Send to"/>		<input type="button" value="File"/>
						<input checked="" type="checkbox"/>		<input type="button" value="Get Subsequence"/>

☐ 1: HWGHD. exendin-2 - Gila ...[gi:69270]

[BLink](#), [Links](#)

LOCUS HWGHD 35 aa linear VRT 07-MAY-1999  
 DEFINITION exendin-2 - Gila monster.  
 ACCESSION HWGHD  
 VERSION HWGHD GI:69270  
 DBSOURCE pir: locus HWGHD;

summary: #length 35 #molecular-weight 3844 #checksum 9049

; superfamily: glucagon

; PIR dates: 04-Dec-1986 #sequence\_revision 04-Dec-1986 #text\_change 07-May-1999

KEYWORDS amidated carboxyl end; duplication; secretagogue; venom.

SOURCE Heloderma suspectum (Gila monster)

ORGANISM Heloderma suspectum

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Lepidosauria; Squamata; Scleroglossa; Anguimorpha; Helodermatidae; Heloderma.

REFERENCE 1 (residues 1 to 35)

AUTHORS Hoshino,M., Yanaihara,C., Hong,Y.M., Kishida,S., Katsumaru,Y., Vandermeers,A., Vandermeers-Piret,M.C., Robberecht,P., Christophe,J. and Yanaihara,N.

TITLE Primary structure of helodermin, a VIP-secretin-like peptide isolated from Gila monster venom

JOURNAL FEBS Lett. 178 (2), 233-239 (1984)

MEDLINE 85076959

PUBMED 6439576

REFERENCE 2 (residues 1 to 35)

AUTHORS Vandermeers,A., Gourlet,P., Vandermeers-Piret,M.C., Cauvin,A., De Neef,P., Rathe,J., Svoboda,M., Robberecht,P. and Christophe,J.

TITLE Chemical, immunological and biological properties of peptides like vasoactive-intestinal-peptide and peptide-histidine-isoleucinamide extracted from the venom of two lizards (Heloderma horridum and Heloderma suspectum)

JOURNAL Eur. J. Biochem. 164 (2), 321-327 (1987)

MEDLINE 87190398

PUBMED 3569266

REFERENCE 3 (residues 1 to 35)

AUTHORS Robberecht,P., Vandermeers,A., Vandermeers-Piret,M.C., Gourlet,P., Cauvin,A., De Neef,P. and Christophe,J.

TITLE Helodermin-like peptides

JOURNAL Ann. N. Y. Acad. Sci. 527, 186-203 (1988)

MEDLINE 88267739

PUBMED 3291692

REMARK annotation

the discrepancies at positions 8 and 9 reported by Hoshino et al. (reference number A01556) and Vandermeers et al. (reference number A37584) cannot yet be resolved but do not appear to be the result of errors in the sequence determinations; it is even possible that two variants exist

COMMENT      Exendins are venom components that are thought to bind to receptors for vasoactive intestinal peptide and/or secretin on pancreatic acinar cells and to activate adenylate cyclase, resulting in secretion of amylase.

FEATURES      Location/Qualifiers  
    source      1..35  
                 /organism="Heloderma suspectum"  
                 /db\_xref="taxon:8554"  
    Protein      1..35  
                 /product="exendin-2"  
                 /note="helodermin; helodermin S35"  
    Site      35  
                 /site\_type="modified"  
                 /note="amidated carboxyl end (Pro)"

ORIGIN  
//      1 hsdaiftqgy skllaklalq kylasilgsr tsppp

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[NCBI](#) | [NLM](#) | [NIH](#)

Dec 1 2005 12:33:28



STIC-ILL

From: Canella, Karen  
Sent: Monday, December 08, 2003 6:09 PM  
To: STIC-ILL  
Subject: ill order 08/908,867

*Hmc*  
*ord*

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Eur Journal of biochemistry, 1987, 164(2):321-327
2. Ann NY Acad Sci, 1988, Vol. 527, pp. 186-203
3. FEBS Lett, 1984, 178(2):233-239

STIC-ILL

MLC

PC660A1D4

From: Canella, Karen  
Sent: Monday, December 08, 2003 3:47 PM  
To: STIC-ILL  
Subject: ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Acta Radiologica, 1988 Jan-Feb, 29(1):49-52  
2. Ann NY Acad Sci, 1988, pp. 168-185  
3. Digestion, 1978, Vol. 17, No. 5, pp. 459-460  
4. BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
DUPLICATE 13  
ACCESSION NUMBER: 1994:102262 BIOSIS  
DOCUMENT NUMBER: PREV199497115262  
TITLE: Postprandial GLP-1 in patients after esophageal  
resection, total gastrectomy and massive small-  
bowel resection.  
AUTHOR(S): Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.;  
Schaper, S.  
CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines  
Krankenhaus, Vienna, Austria  
SOURCE: Digestion, (1993) Vol. 54, No. 6, pp. 386-388.  
Meeting Info.: International Symposium on Glucagon-Like  
Peptide-1. Copenhagen, Denmark. May 17-19, 1993.  
CODEN: DIGEBW. ISSN: 0012-2823.  
DOCUMENT TYPE: Conference; (Meeting)  
Abstract; (Abstracts Only)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 5 Mar 1994  
Last Updated on STN: 5 Mar 1994

5. SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN  
ACCESSION NUMBER: 96:388172 SCISEARCH  
THE GENUINE ARTICLE: UJ883  
TITLE: GASTROINTESTINAL EFFECTS OF GLUCAGON  
-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF  
ACTION  
AUTHOR: HOLST J J (Reprint); WOJDEMAN M; WETTERGREN A  
SOURCE: DIABETES, (MAY 1996) Vol. 45, Supp. 2, pp. 859.  
ISSN: 0012-1797.  
DOCUMENT TYPE: Conference; Journal  
FILE SEGMENT: LIFE; CLIN  
LANGUAGE: ENGLISH  
REFERENCE COUNT: No References

## STIC-ILL

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**From:** Canella, Karen  
**Sent:** Monday, December 08, 2003 6:09 PM  
**To:** STIC-ILL  
**Subject:** ill order 08/908,867

*THC*  
*only*

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Eur Journal of biochemistry, 1987, 164(2):321-327
2. Ann NY Acad Sci, 1988, Vol. 527, pp. 186-203
3. FEBS Lett, 1984, 178(2):233-239

STIC-ILL

MTA  
011.14

From: Canella, Karen  
Sent: Monday, December 08, 2003 3:47 PM  
To: STIC-ILL  
Subject: ill order 08/908,867

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Acta Radiologica, 1988 Jan-Feb, 29(1):49-52
2. Ann NY Acad Sci, 1988, pp. 168-185
3. Digestion, 1978, Vol. 17, No. 5, pp. 459-460
4. BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
DUPLICATE 13  
ACCESSION NUMBER: 1994:102262 BIOSIS  
DOCUMENT NUMBER: PREV199497115262  
TITLE: Postprandial GLP-1 in patients after esophageal  
resection, total gastrectomy and massive small-  
bowel resection.  
AUTHOR(S): Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.;  
Schaper, S.  
CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines  
Krankenhaus, Vienna, Austria  
SOURCE: Digestion, (1993) Vol. 54, No. 6, pp. 386-388.  
Meeting Info.: International Symposium on Glucagon-Like  
Peptide-1. Copenhagen, Denmark. May 17-19, 1993.  
CODEN: DIGEBW. ISSN: 0012-2823.  
DOCUMENT TYPE: Conference; (Meeting)  
Abstract; (Abstracts Only)  
LANGUAGE: English  
ENTRY DATE: Entered STN: 5 Mar 1994  
Last Updated on STN: 5 Mar 1994

5. SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN  
ACCESSION NUMBER: 96:388172 SCISEARCH  
THE GENUINE ARTICLE: UJ883  
TITLE: GASTROINTESTINAL EFFECTS OF GLUCAGON  
-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF  
ACTION  
AUTHOR: HOLST J J (Reprint); WOJDEMAN M; WETTERGREN A  
SOURCE: DIABETES, (MAY 1996) Vol. 45, Supp. 2, pp. 859.  
ISSN: 0012-1797.  
DOCUMENT TYPE: Conference; Journal  
FILE SEGMENT: LIFE; CLIN  
LANGUAGE: ENGLISH  
REFERENCE COUNT: No References

STIC-ILL

From: Canella, Karen  
Sent: Monday, December 08, 2003 3:47 PM  
To: STIC-ILL  
Subject: ill order 08/908,867

474763 NO

Art Unit 1642 Location 8E12(mail)

Telephone Number 308-8362

Application Number 08/908,867

1. Acta Radiologica, 1988 Jan-Feb, 29(1):49-52
2. Ann NY Acad Sci, 1988, pp. 168-185
3. Digestion, 1978, Vol. 17, No. 5, pp. 459-460

12500006

4. BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC. on STN  
DUPLICATE 13

ACCESSION NUMBER: 1994:102262 BIOSIS

DOCUMENT NUMBER: PREV199497115262

TITLE: Postprandial GLP-1 in patients after esophageal  
resection, total gastrectomy and massive small-  
bowel resection.

AUTHOR(S): Miholic, J. [Reprint author]; Orskov, C.; Holst, J. J.;  
Schaper, S.

CORPORATE SOURCE: II. Chirurgische Universitaetsklin., Allgemeines  
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SOURCE: Digestion, (1993) Vol. 54, No. 6, pp. 386-388.  
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CODEN: DIGEBW. ISSN: 0012-2823.

DOCUMENT TYPE: Conference; (Meeting)  
Abstract; (Abstracts Only)

LANGUAGE: English

ENTRY DATE: Entered STN: 5 Mar 1994  
Last Updated on STN: 5 Mar 1994

COMPLETED

5. SCISEARCH COPYRIGHT 2003 THOMSON ISI on STN

ACCESSION NUMBER: 96:388172 SCISEARCH

THE GENUINE ARTICLE: UJ883

TITLE: GASTROINTESTINAL EFFECTS OF GLUCAGON  
-LIKE PEPTIDE-1 (GLP-1) - MECHANISM OF  
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AUTHOR: HOLST J J (Reprint); WOJDEMAN M; WETTERGREN A

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ISSN: 0012-1797.

DOCUMENT TYPE: Conference; Journal

FILE SEGMENT: LIFE; CLIN

LANGUAGE: ENGLISH

REFERENCE COUNT: No References